Reply to Office Action

REMARKS/ARGUMENTS

Information Disclosure Statement

The Examiner has objected to the Information Disclosure Statement filed on May 31, 2005 as failing to comply with 37 CFR 1.98(a)(2) because copies of documents II and JA were not provided. On November 23, 2005, Applicants submitted copies of documents II and JA, and they respectfully request that the Examiner acknowledge that the references have been received and considered.

In addition, the Office has indicated that reference HV was not considered because a portion of it was submitted to the Office as a CD, rather than on paper. This reference was provided to one of the applicants by a third party in connection with a co-pending application (10/443,273 (Reference EQ, of record)). I understand that the CD contains a text file entitled "DISCLOSE.txt," which occupies about 208.3 megabytes of disk space and a second text file entitled "SHORT.txt," which occupies about 9.8 megabytes of disk space. The "DISCLOSE.txt," document is purported to list millions of random DNA sequences (as noted in the paper portion of reference HV), and the "SHORT.txt," document is purported to contain a subset of this listing, omitting the 11 and 12 nucleotide sequences (a third "README.txt" file on the CD explains that the "SHORT.txt" file is provided "[f]or the benefit of reviewers whose installations do not have sufficient memory to read the DISCLOSE file"). My word processor has calculated the "SHORT.txt" document to occupy 12009 pages if printed, and, while I have not ascertained the length of the "DISCLOSE.txt," document, if megabytes correlate to page length, the "DISCLOSE.txt," document would consume 255,253 pages of paper (which could potentially be shortened by four- or five-fold by reformatting the document to contain multiple columns).

Reviewing reference HV to assess whether it could possibly be relevant to the application is a nearly impossible task, given the sheer volume of information contained in this document, and I have no independent understanding that any of the information contained in reference HV is material to the patentability of the present application. Moreover, the purported author of reference HV has stated, in a letter that accompanies

Reply to Office Action

reference HV, that it was deposited in a library on March 14, 2002, which is after the priority date claimed in the present application; thus reference HV does not even constitute prior art.

Reference HV was disclosed to the Office in the same format as it was received from the third party – partially in paper and partially on CD-ROM, which, given the sheer volume of paper otherwise required, is reasonable. Applicants have attempted to disclose the information contained in the CD-ROM to the Office in a reasonable manner, and the Examiner is respectfully invited to consider the reference. Applicants have submitted the paper portion of reference HV without the CD-ROM (as reference OK), and the Examiner is respectfully urged to consider it. However, under these circumstances, a paper copy of the files on the CD-ROM forming part of reference HV will not be separately provided.

Discussion of Claim Amendments

Claims 1, 4, 5, and 6 have been amended to correct informalities and to more specifically describe the invention. Claims 2-5 have been canceled. The amendments are supported by the disclosure as originally filed in paragraph [0038].

New claims 62-84 are supported in the specification, for example at page 16 (paragraph [0063]).

Accordingly, no new matter has been added to the application by way of these amendments.

Summary of the Office Action

The Office Action alleges that claim 5 is a substantial duplicate of claim 2 and will be objected to if claim 2 is found allowable. The Office Action objects to claims 1-8 and 10 as allegedly containing informalities. Further, the Office Action rejects claims 1, 6-8, and 10 under 35 U.S.C. § 112 as indefinite and failing to satisfy the written description requirement. The Office Action rejects claims 1-5, 7-8, and 10 under 35 U.S.C. § 102(b) as anticipated by Kumar et al., J. Bio. Chem., 275(4), 2973-2978 (2000) (hereinafter the "Kumar 2000 article"). The Office Action rejects claims 1-6 under 35 U.S.C. § 102(b) as anticipated by Patel et al., Oral Oncology, 33(3), 197-203 (1997) (hereinafter the "Patel 1997 article"). The Office Action rejects claims 1-5 and 7-8 under 35 U.S.C. § 102(b) as anticipated by

Reply to Office Action

Horrevoets et al., Blood, 93(10), 3418-3431 (1999) (hereinaster the "Horrevoets 1999 article"). The Office Action rejects claims 1-3, 5-6, and 8 under 35 U.S.C. § 102(b) as anticipated by Lamerdin et al., AC005339 (1998) (hereinaster "Lamerdin 1998"). The Office Action rejects claims 1 and 6-8 under 35 U.S.C. § 102(b) as anticipated by Goltsev et al., J. Biol. Chem., 272(32), 19641-19644 (1997) (hereinaster the "Goltsev 1997 article").

The Present Invention

The present invention relates to a gene encoding SCC-S2. Claims 1, 6-8, 10 and 62-84 are currently pending in the application.

Discussion of the Section 112 Rejections

The claims as amended clearly point out the invention with the required specificity, thus the basis for the objections appears to be moot. Accordingly, the Section 112 objections should be withdrawn.

Discussion of the Section 102 Rejections

The Kumar 2000 article, the Patel 1997 article, and the Horrevoets 1999 article allegedly disclose an isolated nucleic acid molecule comprising a polynucleotide that encodes amino acids from about 1 to about 188 of SEQ ID NO:2, about 10 nucleotides from the coding region of SEQ ID NO:2, and about 50 to about 100 contiguous nucleotides from the coding region of SEQ ID NO:2. Claims 1 and 6, as amended, disclose polynucleotides encoding "8 to about 180 contiguous amino acids" of SEQ ID NO:2. None of these references discloses the specific sequences recited in the claims as amended. Lamerdin 1998 and the Goltsev 1997 article allegedly disclose portions of SEQ ID NO:1 and 2. Neither reference, however, discloses the specific portion of either sequence as recited in the amended claims. Accordingly, the Section 102 rejections should be withdrawn.

Reply to Office Action

Conclusion

Applicants respectfully submit that the patent application is in condition for allowance. If, in the opinion of the Examiner, a telephone conference would expedite the prosecution of the subject application, the Examiner is invited to call the undersigned attorney.

Respectfully submitted,

M. Daniel Hemer, Reg. No. 41,826 LEYDIG, VOIT & MAYER, LTD. Two Prudential Plaza, Suite 4900 180 North Stetson Avenue Chicago, Illinois 60601-6780 (312) 616-5600 (telephone) (312) 616-5700 (facsimile)

Date: February 23, 2006